

ORCHID ROOT ROT, RHIZOCTONIA SOLANI KUEHN

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This disease is quite destructive to orchids in Florida. Both seedlings in community pots and older plants are susceptible. Young seedlings of *Cattleya* and their hybrids, *Cypripedium* and *Oncidium* in the state have been killed or severely damaged by this organism. Mature plants of the above as well as *Trichocentrum albobviolaceum* have been found severely infected.

**SYMPTOMS.** A brown mycelium is the first evidence of root rot on young seedlings. The rot if unchecked will advance up the stem and onto the lower leaves. The main symptoms are a girdling and then a wilting, followed by a brown discoloration of the affected plant.

When mature plants are attacked, their decline may be quite gradual. Usually the rot is confined to the roots, causing deterioration, although under some conditions the rot will progress into the rhizomes and partly up the pseudo-bulbs. Plants with root rot eventually become yellow, have shriveled pseudo-bulbs, and leaves that are thin and somewhat twisted (Fig. 1). Plants growing in bark and osmunda fiber that is old and water-logged are most often attacked. A healthy *Cattleya* orchid with long fibrous root system is shown in Fig. 2.

**CONTROL.** Plants with root rot should be removed from the old pot and the rhizomes and roots dipped for 5 minutes or drenched with benomyl at the rate of 1 tablespoon per gallon of water. Repot plant in a clean pot with fresh medium.



Fig. 1.--Diseased *Cattleya* orchid.

Fig. 2.--Healthy *Cattleya* orchid.